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Project Notes

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Initiative for Planned and Participatory Reconstruction

Community participation ensures that development planning meets the needs of stakeholders and obtains their support. Reconstruction planning following disasters also benefits from residents' input. After the devastating earthquake in Gujarat in January 2001, three non-government organizations based in the affected region, with the support of the FIRE-D project, developed a system to obtain information and reconstruction proposals from diverse stakeholders. This Project Note describes the accomplishments and future plans of the Initiative for Planned and Participatory Reconstruction in the Kutch district of the state of Gujarat.

n January 26, 2001, a devastating earthquake shattered western and central Gujarat where nearly 20 million people live. Five districts were severely impacted, but the worst affected was Kutch (also known as Kachchh), where more than 90 percent of the deaths and 85 percent of the asset losses occurred. Four towns—including the district's largest, Bhuj—and more than 400 villages were severely hit, destroying lives, infrastructure, buildings, the economy, and livelihoods. The death toll was nearly 14,000 and 167,000 were injured. More than 1.2 million homes were badly damaged or destroyed, as well as numerous small enterprises, schools, health clinics, rural and urban water systems, and electricity and telecommunications systems.

Kutch is a sparsely populated, resource poor region in a relatively rich state that is vulnerable to cyclones and drought, as well as earthquakes. The 6.9 magnitude earthquake struck in a second consecutive drought year. While the greatest asset losses were in the housing sector, the livelihoods of many families were also disrupted. A joint assessment by the World Bank and Asian Development Bank a month later found that 19,000 handicraft artisans and several

thousand salt farmers in Kutch were the most severely affected.¹ Some 20,000 cattle deaths were reported, eliminating another important source of livelihood. The assessment report concluded that the "majority of the reconstruction efforts should be undertaken by the affected population themselves." The overall recovery strategy was to empower communities and mitigate social impacts.

Three Non-Government Organizations Join Together to Respond to the Disaster

The Environmental Planning Collaborative (EPC) and the City Managers' Association of Gujarat (CMAG), in partnership with the Kutch Nav Nirman Abhiyan (KNNA), initiated a series of activities within days of the earthquake to find solutions to immediate problems and to start the process of long-term recovery. The partners called themselves the Earthquake Technical Assistance Cell. They believed that community-driven reconstruction is key to recovery programs.

¹ Gujarat Earthquake Recovery Program: Assessment Report by The World Bank and Asian Development Bank (March 2001).

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The Environmental Planning Collaborative, a national not-for-profit organization established in 1996, provides technical support to urban local bodies in planning and development (http://epc.amd.tripod.com/index.html). Its strengths include regional planning, management, and mapping techniques. EPC had completed a Regional Development Plan for Kutch working closely with the network of community organizations described below.

The City Managers' Association of Gujaratis an association of urban local bodies of the state that focuses on capacity building and modern urban management methods (www.cmag-india.org). CMAG's strengths are networking, training, and advocacy. Established as a trust in 1997, it is affiliated with the International City/County Management Association based in the U.S.

The Kutch Nav Nirman Abhiyan, the Kutch New Building Movement, is a collective organization of 14 grassroots non-government organizations (NGOs) in Kutch (www.onlinevolunteers.org/relief/kna.htm). It formed after a disastrous cyclone in June 1998 to undertake relief and rehabilitation work in a coordinated fashion. The Abhiyan network is active in 350 villages and supports activities ranging from natural resource management to health and micro-credit programs.

The Earthquake Technical Assistance Cell was an emergency response that supported the rescue, relief, and restoration phases after the disaster. The partners generated and distributed some base and thematic maps of the Kutch, conducted a rapid assessment of damages, and facilitated the establishment of an information management system and communication network. They also recognized that careful planning for reconstruction was crucial for long-term recovery. Working with TCG International, LLC, the prime contractor for the FIRE-D project, they conceived the Initiative for Planned and Participatory Reconstruction (IPPR) and sought USAID support. USAID funded the proposal through the FIRE-D project in March 2001.

Accomplishments and Future Activities

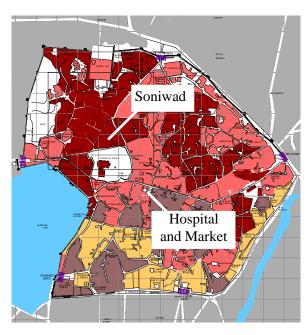
The accomplishments and future plans of the five components of the IPPR effort are:

1. Abhiyan Information Centre

The partners set up an earthquake reconstruction information center in Bhuj that produced maps and other data widely used by government agencies, donors, and voluntary organizations.

Immediately after the disaster, government agencies and donors were each developing their own oftenconflicting information systems. The newly created Gujarat State Disaster Management Authority (GSDMA), the United Nations Development Program (UNDP), and the KNNA eventually recognized that they were duplicating efforts. So, they decided to set up a joint information cell, with EPC, in Bhuj to speed up the process of information collection and dissemination. The four organizations merged their independent efforts to create the Kutch Rehabilitation Information Cell (KRIC) and put together a 14-member team including their own professionals, five National UN Volunteers, and three staff persons. As it evolved, the information center engaged its team to:

- collect information from government institutions, from NGOs, and from village inhabitants through sub-centers relating to clusters of villages;
- design formats to organize information coming in from the field;
- develop software to store information in ways to generate reports and answer queries;
- prepare GIS (graphical information systems) maps on themes;



The GIS map of Soniwad, within the Walled City of Bhuj, shows the first urban neighborhood where the Initiative tested community participation in defining priority needs and proposing solutions.

- computerize all types of information in various formats and languages (Gujarati, English, and Kutchi); and
- analyze data, compile it in a presentable way, and disseminate it so that stakeholders can use it to frame recommendations.

With IPPR support, EPC provided the information manager, designed the GIS-based databases, trained volunteers to compile and enter data, and disseminated data in brochures, booklets, and other documents. The information center gathered some data itself and incorporated data collected by the partners with other funding. For example, the Abhiyan network had carried out a rapid assessment of the affected area, assisted by the Tata Institute of Social Sciences and Gujarat Institute for Development Research, and provided the results to the information center. The National UN Volunteers assigned to the project collected information from villagers that was also entered into the databases.

The KRIC became the primary source of information for district and state government agencies, the UN Donor Coordination Center, UNDP, World Health Organization, hospitals and schools, CARE, Save the Children, and implementing agencies. After a year, IPPR (represented by EPC) completed its work establishing KRIC and has shifted its focus to implementing reconstruction plans. KRIC continues as a joint venture of KNNA, GSDMA, and UNDP.

2. Bhadresar Strategic Action Plan for Reconstruction

The Initiative partners decided to test and document a process of community participation in long-term reconstruction planning in one urban community in Bhuj and another in a less populated area. For a remote settlement, IPPR selected Bhadresar, a village about 70 kilometers from Bhuj with a population of 4,300, because it had an active Abhiyan member organization, a diverse community, active implementing agencies, and nearly all of its dwellings were severely damaged or destroyed by the earthquake.

The EPC *objectives* were to help the communities articulate a long-term vision for the settlement; identify projects to strengthen its economy and collate them in an action plan for long-term recovery and development; and help the community negotiate with the implementing agencies and channel available resources to support its vision and plan.

Its *methodology* was to: review the rehabilitation plans of the government and NGOs; build a comprehensive information base on the community; form a representative reconstruction committee and meet with it to review the Initiative; prepare base and thematic GIS maps; conduct a SWOT analysis (of the settlement's internal Strengths and Weaknesses and external **O**pportunities and **T**hreats) with village opinion leaders and generate strategies for reconstruction and development; identify stakeholders to generate draft proposals; prepare action plans with implementing agencies; evaluate proposals and resolve any conflicts; prepare a vision document with clearly identified projects over a 10 year time frame and share it with key stakeholders; and assess needs and create plans to strengthen the local council (the panchayat) to implement the vision.

The planning effort in the Bhadresar settlement was very successful. After structuring the consultative



Chuck Billand, TCGI, and Azhar Tyabji, EPC, meet with stakeholders in Soniwad.

process, the EPC team consulted stakeholders over a six-month period. The team helped the participants articulate their vision for the future, reach consensus on six essential reconstruction activities, and suggest projects for each activity.

The proposed reconstruction activities for Bhadresar:

a. Water and irrigation

- Provide alternative sources of water supply, such as rainwater harvesting
- Develop watershed to increase water for irrigation
- Promote a collective irrigation system for small farmers
- Extend and increase capacity of the irrigation canal

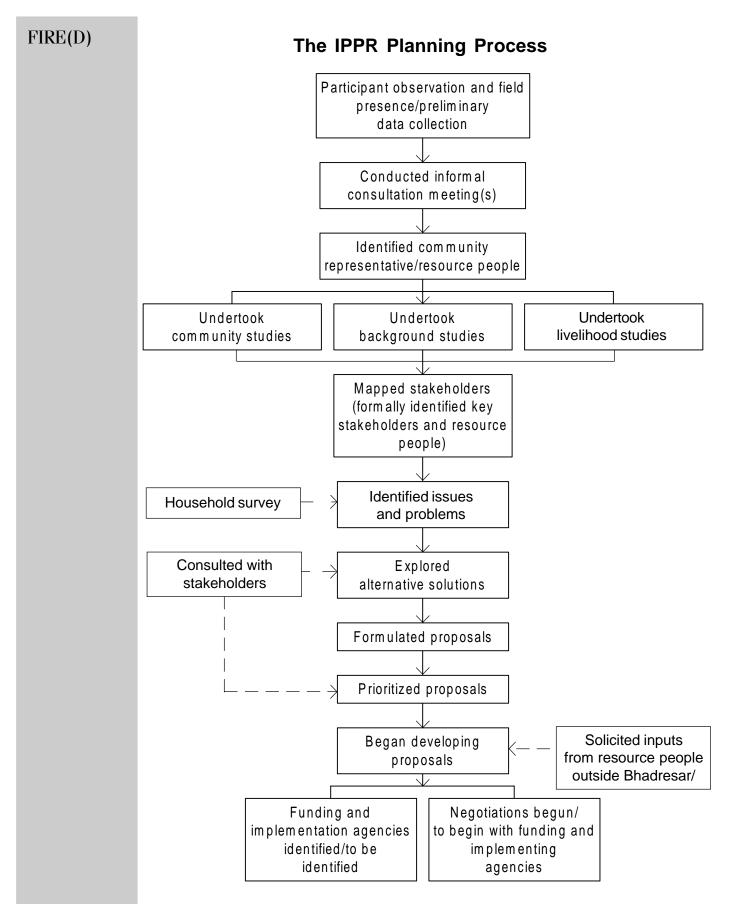
b. Animal husbandry

- Improve fodder availability
- Set up a fodder bank
- · Reclaim wasteland
- Promote agro-forestry practices

c. Livelihood and income generation

- Provide formal credit to the fishing community
- Set up micro-credit for small traders, such as vegetable and fruit sellers
- Provide vocational training for unemployed, unskilled laborers
- Provide training in embroidery, stitching, and marketing for women
- Provide facilities and computer training for unemployed educated youth

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d. Reconstruction and rehabilitation

- Apply retrofitting technology to facilitate earthquake and cyclone proof housing²
- Set up an information center at Bhadresar

e. Tourism

- Develop a craft market place near the Basai Jain Temple—one of the most ancient Jain pilgrimage sites—and attract vendors to it
- Develop a Kutch arts and crafts museum in the same area
- Revive other heritage sites

f. Infrastructure

- Design settlement-wide solid waste collection and storm water disposal systems
- Provide coastal community with basic services
- Designate a zone for vegetable sellers and provide them storage facilities

The consultative team identified—and then worked closely with—two prospective implementing agencies, the Yusuf Mehroully Centre, a Mumbai-based voluntary organization working on rural development schemes in the area, and the International Society for Krishna Consciousness, to influence the process by which they would implement rehabilitation projects. The team presented draft proposals to these agencies, and other key stakeholders, and helped community representatives negotiate with them to support their long-term vision.

IPPR will continue to support stakeholder participation in the reconstruction process in Bhadresar. The EPC will prepare more detailed project proposals, seek funding, and work with implementing agencies to execute them. Implementation requires continued dialogue between citizens, businesses, NGOs, the village council, and the district government.

3. Bhuj Strategic Action Plan for Reconstruction

In the historic city of Bhuj, the Initiative partners selected the residential neighborhoods of Soniwad and two nearby areas and the commercial intersection of Saraf Bazaar. Some 10,000 people had lived in this approximately 0.5 square kilometer area in the walled city where many died and more than 75 percent of the properties were destroyed or heavily damaged.

The Initiative helped the Soniwad community identify its highest priority needs and resolve housing





The hospital and market in the Walled City of Bhuj were severely damaged.

construction benefit issues between the government and beneficiaries. It developed a model that led to successful civil society participation in preparing the Bhuj Development Plan.

In two community meetings, residents and business stakeholders:

- *identified their major problems* as suspension of schools, small business closures, lack of places to live, and trauma.
- *defined a preliminary list of strategies*: reinstatement of education; stimulation of local economy; and provision of temporary/permanent shelter.
- proposed eight micro-projects including temporary shelters, a business directory and retail linking, Picture Bhuj! (a community image database for

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² Housing reconstruction is the responsibility of individual households using private contractors and self-help. Government grants of varying amounts were given to households depending on the degree of damage and size of previous dwelling.

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 $Soniwad \, community \, of \, Bhuj \, immediately \, after \, the \, earth quake.$

reconstruction), a mobile library, street theater on post disaster issues, art therapy workshops for the injured; and establishment of a handicrafts center.

The partners developed proposals for each microproject, but most have not yet been implemented due to issues beyond IPPR's control. For example, EPC decided to help 50 families obtain temporary shelter and to formulate a method for doing it on a larger scale. Initially, the UNDP agreed to fund it. EPC consulted residents in identifying families and a site in the community and drafting house plans. Three Bhuj NGOs agreed to make site improvements and assemble prefabricated houses. But the project did not proceed because, unknown to the community, the district government had already acquired a relocation site about 10 kilometers outside the city and constructed infrastructure on it. Given the district's investment, the UNDP declined to fund the pilot.

Other IPPR activities were more successful.

- The Initiative facilitated dialogue between district officials and stakeholders in Soniwad on issues related to beneficiary relocation housing and reconstruction benefits and drafted responses to residents' Frequently Asked Questions.
- IPPR spurred local photographers to prepare a historical architectural poster that captures the unique quality of the walled city architecture that was lost in the earthquake and the reconstruction process. The poster was distributed to increase public awareness of the town's rich architectural heritage and help the new Bhuj retain some of its traditional urban character.
- EPC is designing a booklet on earthquakeresistant construction.

CMAG, with support from the National Institute of Urban Affairs under the FIRE-D project, and technical support from Kampsax India consultants, assessed the eartquake's impact on five municipalities in Kutch. This study included structural and financial assessments of damages and preparation of ten-year financial operating plans for the municipalities. EPC used this study's broad recommendations for resource mobilization in its strategic planning exercise for Bhuj.

The Soniwad experiment's impact was greatly expanded after the Asian Development Bank announced its support of the state government's effort to reconstruct Kutch's four devastated towns. The state government first decided to prepare development plans to guide reconstruction and then commissioned EPC to prepare the Bhuj Development Plan. EPC developed broad public support for stakeholder participation in the plan's preparation through community meetings and distribution of a note about the process and how the plan would affect the community's reconstruction. The EPC wrote the note in "question and answer" format in the local language, Gujarati, and distributed copies citywide.

While the Development Plan was funded separately from the Initiative, in its approach and methodology, EPC utilized the lessons learned and resources available from the IPPR. The planning team undertook more than 150 consultations in four months, distilling strategies first in the form of micro-projects in two areas, and later in the form of official proposals for rebuilding the social and physical infrastructure. The consultation process that the Initiative started in one neighborhood thus continued under the development of a plan for the entire city of 150,000 to 200,000 people.

The EPC completed the Bhuj Development Plan in December. A development plan principally concerns the physical growth of a city; it is typically not concerned with social infrastructure. However, in the aftermath

of the disaster which affected all the social and economic institutions of the city as well as its physical assets, EPC saw the opportunity to integrate planning for the informal sector, social infrastructure, economic development, the environment, tourism, and culture into the city's development plan.

In addition to land use and infrastructure strategies, the plan defined 14 strategic social infrastructure projects including: setting up temporary markets; developing new industrial infrastructure; developing wholesale markets and a freight complex; preparing an asset management plan; shifting the bus terminal to the old railway station; town planning outside the Walled City; constructing educational and health facilities and facilities for senior citizens; and encouraging lakefront development, urban water harvesting, and heritage conservation.

In the coming months, under the IPPR, EPC will seek to develop social infrastructure projects that might not otherwise be implemented by government alone. The team will consult with stakeholders to elaborate 15 projects, select several pilot projects, and seek funding to implement them.

4. Abhiyan Sub-Center in Kodki

The word *setu* means "bridge" in Sanskrit and Hindi. The Abhiyan *setus* or sub-centers are a bridge between communities, NGOs working in the field, and state government agencies. The Initiative is establishing *setus* in the Kutch district in response to the earthquake and drought to fill gaps in communication between the government and remote settlements. The *setu* objectives are to:

- act as a source of information for rural communities;
- empower local communities through enhancing their access to information;
- facilitate interaction between villagers and planners, social workers, and officials;
- institutionalize transparency and efficiency in post disaster decision-making; and
- facilitate accurate and regular flow of information between villagers and government organizations.

An EPC staff member experienced in social fieldwork was assigned to Kodhi, a village five kilometers from Bhuj, to develop a model sub-center. The work involved identifying information needs through informal meetings with local stakeholders; providing feedback to NGOs, state government, and communities; and facilitating partnerships between NGOs and community groups. This was significant because several villages distrusted NGO motives and had refused their support in the months after the earthquake.

During the initial months after the disaster, UN Volunteers collected household and community-level information in the 18 villages surrounding Kodki about economic, social, and physical infrastructure losses and needs, such as:

- handicraft work sheds and rain water harvesting structures to be rebuilt;
- types of businesses to be reactivated;
- number of persons injured and killed and livestock lost; and
- extent of housing damage, schools and hospitals to be rebuilt, alternatives for drinking water.

The low literacy rate, language differences, and dispersed population complicated information sharing. Much information was gathered in informal talks with villagers. Since occupation is often linked to tribe, caste, and religion, volunteers met separately with these diverse groups to explain the Initiative. The volunteers used information gathering on earthquake damage as their introduction to the communities; later, they would move from assisting residents to identify problems to obtaining their ideas about solutions. One volunteer said that the sub-center "is an experiment providing an opportunity for the individuals and the communities [to decide] the course of the rehab process by making use of information. So it is an experiment in empowerment through information."

Based on the lessons learned in this pilot, the team plans to set up information centers in four additional locations in the coming months. Each *setu* will serve clusters of 10 to 15 villages.

5. Planning Guide for Post-Disaster Recovery

Working with its partners, the Environmental Planning Collaborative is drafting a *Planning Guide for Post-Disaster Recovery*, the proposed outcome of the Initiative. The Gujarat State Disaster Management Authority is considering facilitating the on-going consultation process in Bhadresar and Bhuj, reviewing the planning guide, and publishing it under its banner. The guide will be widely available to state and local officials and NGOs. The City Managers' Association of Gujarat will use the guide in workshops to train municipal officials throughout the state.

The Initiative has collected much written information, statistical data, maps, and photographs to record the experiences of the information center and sub-center and strategic planning processes in the two areas. EPC collected additional information to contrast the development planning in Bhuj with that in the other three municipalities. In one, the process did not start out in a participatory way. When differing opinions emerged, however, the stakeholders came together and it became participatory. The activities of the Bhuj

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Area Development Authority and the Kutch District Government have been recorded and conclusions drawn about successes and failures.

Lessons Learned

Sharing information, and using GIS maps to display it, strengthens reconstruction planning. The Initiative introduced using the latest information technologies in disaster situations in India. Everyone—state and district agencies, donors, and NGOs—benefited from agreeing to gather and share information after the disaster. Supporting a common information cell conserved scarce resources and facilitated coordinated action. Tapping a NGO with strong GIS mapping capability, and experience in the region, greatly facilitated sharing information at all levels and developing plans based on the best available current data.

Residents' participation in preparing reconstruction plans is both feasible and desirable. The Initiative also introduced participatory planning for disaster reconstruction in India. A major outcome of the Initiative is a tested methodology for involving all stakeholders, including residents of towns and remote settlements, in a primary way in planning the reconstruction and development of their communities after a disaster. The IPPR was the first effort made by planners and NGOs in India to involve residents in reconstruction planning in a comprehensive, structured way. Many lessons learned about this methodology will be described in the *Guide*.

Such participatory planning helps achieve the decentralization objectives of the 74th Constitutional Amendment of 1992. Involving community stakeholders in development planning helps ensure that they will support the plan and be more willing to contribute their time and resources to help carry it out. Community empowerment will result in communities that are rebuilt in a way that contributes to sustainable development more so than those in which all planning is done by officials and outside experts.

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Chuck Billand, TCGI Vice President and Initiative Manager, and Kathy Desmond, consultant, wrote this *Project Note*, using three reports of the Environmental Planning Collaborative: *An Initiative for Planned and Participatory Reconstruction: Report on a Planning Process* (2002), *Interim Report* (Dec. 2001), and *Creating Community Institutions: An Experiment with Setu at Kodki Sub-Center* (Dec. 2001). These reports are available from the FIRE-D office in New Delhi and TCGI in Washington, DC. All *Project Notes* are available online at www.dec.org, under title search *FIRE(D)*.

The mission of the Indo-US FIRE(D) Project is to institutionalize the delivery of commercially viable urban environmental infrastructure and services at the local, state and national levels. Since 1994, the Project has been working to support the development of demonstration projects and of a sustainable urban infrastructure finance system. Now, the Project is also pursuing this mission through:

- Expansion of the roles of the private sector, NGOs and CBOs in the development, delivery, operation and maintenance of urban environmental infrastructure;
- Increased efficiency in the operation and maintenance of existing water supply and sewerage systems;
- Strengthened financial management systems at the local level;
- Development of legal and regulatory frameworks at the state level;
- Continued implementation of the 74th Constitutional Amendment; and
- Capacity-building through the development of an Urban Management Training Network.

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